

Comcast Text-to-911

April 2017

Today's agenda

 Comcast Overview 	3
XFINITY Connect App	4
XFINITY Text Messaging	5
Text-to-911 Overview	6
Architecture	7
Deployment	8
PSAP Testing	9
Nationwide Deployment Map	10
Michigan Deployment Map	11

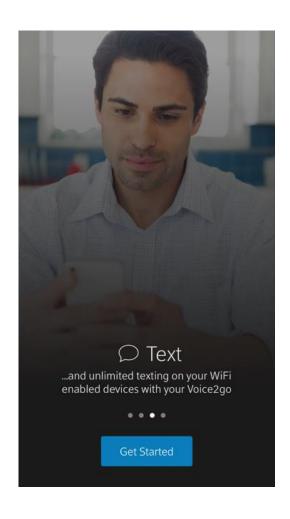


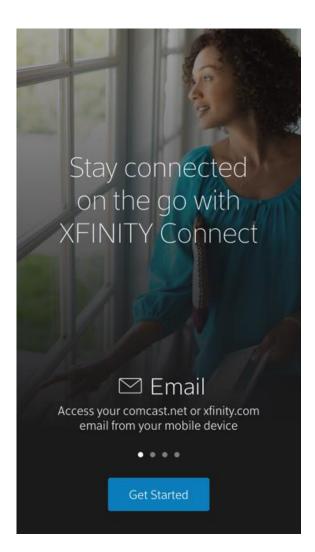
Comcast Overview

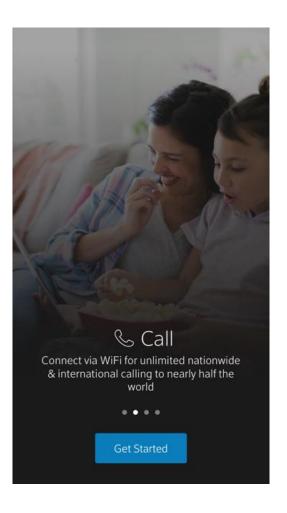
- Comcast Corporation is a global media and technology company with two primary businesses, Comcast Cable and NBCUniversal. Comcast Cable is one of the nation's largest video, highspeed Internet and phone providers to residential customers under the XFINITY brand and also provides these services to businesses.
- Our converged voice platform currently supports over 11.7MM subscribers between our Residential and Commercial Advanced Voice product offerings.
- Comcast also offers several, application based voice services that include capabilities to make and receive voice calls and text messaging over the internet.
- We deploy industry standard best practices for diversity across the entire network, including transport, facilities, and the core elements.
- Comcast E9-1-1 services currently follow the NENA i2 standards.
- Comcast Public Safety evolutionary roadmap for migration into pre Next-Generation 9-1-1 and ESInet interconnection has already started.



XFINITY Connect App





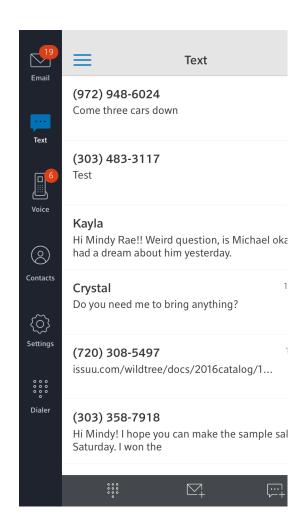




Text Messaging

The XFINITY Connect app is a downloadable app that extends your Comcast services onto mobile devices (Apple and Android), allowing you to:

- Access your Comcast.net email.
- Access your home phone voicemails, including readable voicemail transcripts, view call logs and activate call forwarding.
- Send and receive free text messages to more than 30 countries using your XFINITY Voice service. (For a list of eligible countries, please visit Countries that Support Text Messaging from XFINITY.)
- Make outbound calls and answer calls made to your XFINITY Voice number.
- View Caller ID (only available on specific devices).
- View your Address Book.
- Manage your account (only available on specific devices).
- Make and receive video calls. (For more information, please visit XFINITY Connect App How to Make Video Calls.)



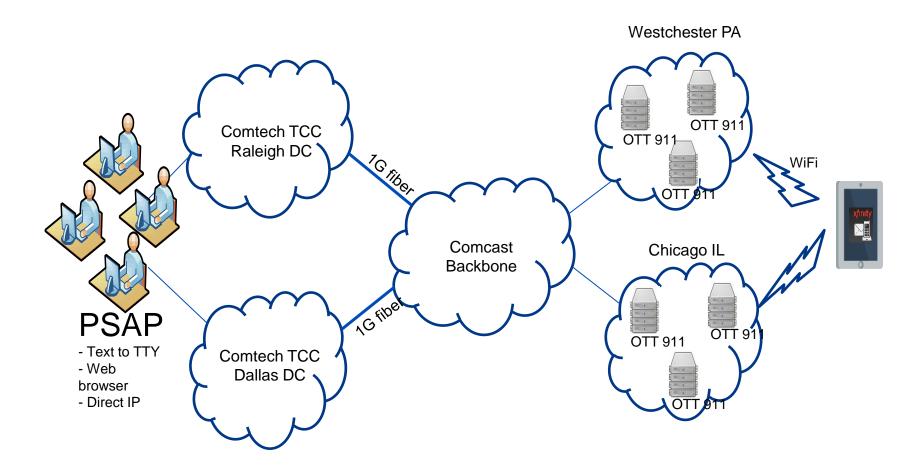


Text-to-911 Overview

- FCC rules require all wireless carriers and other providers of text messaging applications in the United States to deliver emergency texts to call centers that request them.
- Comcast launched Text-to-911 Capabilities on the client application in June of 2015
- XFINITY Customers can use the Connect app to send and receive 9-1-1 Text Messages where supported.
- How it works:
 - Requires the Xfinity Connect application installed on the customers device
 - Requires the device to have access to Wi-Fi to transmit the message
 - Routes the text message to the appropriate 911 responding agency based on the device location
 - PSAP uses the Latitude/Longitude received to map customer location and send First Responders



Architecture





Deployment

- The FCC publishes a readiness list with all PSAPs that are current Text-to-911 ready as well as PSAP that will be ready in the next 90-180 days.
- Some PSAP's have worked directly with wireless providers to establish Text-to-911 services, that are
 no on the FCC's list.
- For PSAP's to receive Text to 911 messages they must have the necessary equipment/software to handle text prior to testing. Confirmation that they are ready will come from ComTech TCS, or the FCC Text to 911 PSAP Registry.
- Comcast sends written notifications to PSAPs a few months ahead of time to inform them that we are aware they are soon going to be Text-to-911 ready and we will be doing testing before the readiness date
- The notification includes an acknowledgement of readiness and a frequently asked questions page about testing.
- All PSAP should be tested by Comcast within 30 days of their compliancy date stated in the FCC list

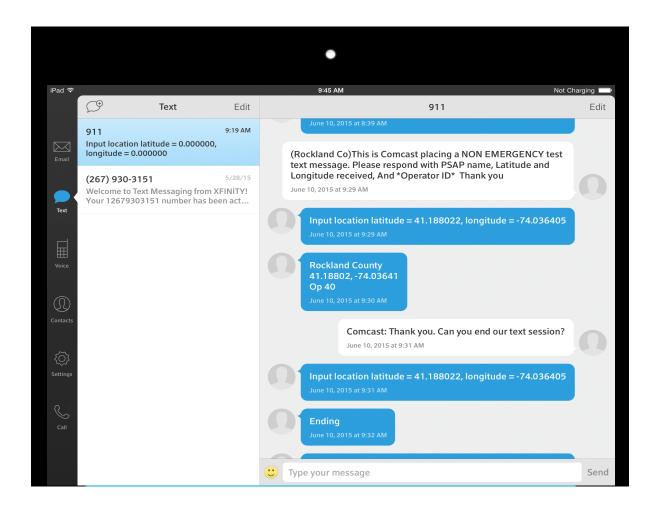


Testing Procedures

- Prior to sending any Text to 911 test messages we contact the PSAP to confirm that they are ready, and able, to receive the test text message and will reply back with the requested information in the text response.
- If the PSAP is not available to test at that time, we will schedule an appropriate time with the PSAP, and reconfirm with a call before initiating testing.
- The message that will be sent to the PSAP will be: This is Comcast placing a NON EMERGENCY test text message. Please respond with PSAP name, Latitude and Longitude received, and *Operator ID*
- If the operator receives the message successfully should reply with the info requested to test the ability to reply back to the user testing two ways communication
- Once the response is received successfully and both PSAP and Comcast tester are satisfied the session is ended
- In case of any issue, troubleshooting will start engaging Comtech support team who will trace the text message
- Results are stored on Comcast database for charts and future reference

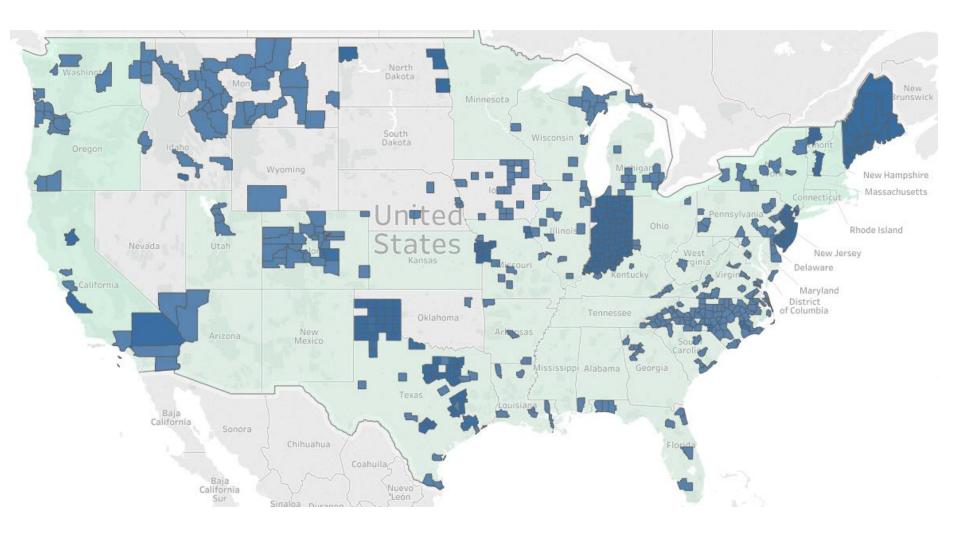


Example XFINFITY Text-to-911 Test Session





XFINTIY Text-to911 Deployment Nationwide





XFINTIY Text-to911 Deployment in Michigan

Counties (19)

- Alger - Iron

- Barry - Lake

- Berrien - Lapeer

- Calhoun - Livingston

- Chippewa - Macomb

- Delta - Marquette

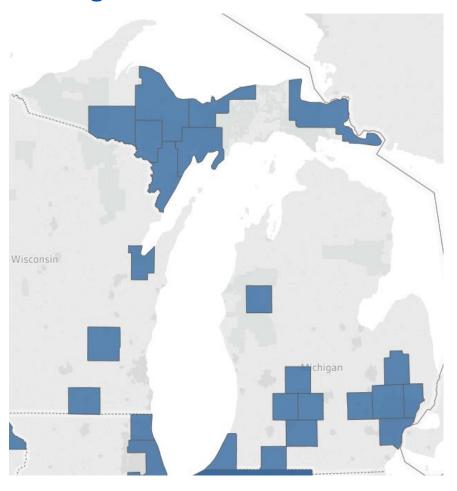
- Dickenson - Menominee

- Eaton - Oakland

- Ionia - St. Joseph

- Wayne

- Certified PSAPs (31)
- (2) Additional PSAP Coming Ready in 2017





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New Comcast XFINITYPSAP Website http://psap.xfinity.com/



